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Civil Engineer



**SOLID AND HAZARDOUS WASTE
COMPLIANCE**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This Air Force Instruction implements Air Force Policy Directive 32-70, *Environmental Quality*. It identifies compliance requirements for all solid and hazardous waste, except radioactive waste. In the United States and its territories, use this guidance with applicable Federal, State, and local standards for solid and hazardous waste. (See AFI 32-7006, *Environmental Program in Foreign Countries*, for solid and hazardous waste compliance requirements at installations outside the United States and its territories.)

SUMMARY OF REVISIONS

This is the initial publication of AFI 32-7042, substantially revising AFR 19-11. This AFI contains new requirements for solid and hazardous waste characterization, training, accumulation, turn in, and disposal. It also outlines new procedures for managing disposal contracts, inspections, permits and record keeping, and host-tenant support. Additionally, it eliminates all requirements pertaining to radioactive waste management.

Chapter 1

HOW TO USE THIS INSTRUCTION

1.1. Applicable Standards and Regulations. Use the procedures in this instruction to comply with applicable Federal, State, and local standards for solid waste (SW) and hazardous waste (HW) management.

1.1.1. For SW, the applicable Federal standard is Subtitle D of Title 40, *Code of Federal Regulations* (40 CFR) Parts 240 to 244, 257, and 258.

1.1.2. HW regulations are in Subtitle C, 40 CFR Parts 260 to 272.

1.1.3. Follow the more restrictive standard if State or local compliance requirements are more protective than the Federal standards.

1.1.4. Air Force activities in foreign countries must manage SW and HW to comply with the Final Governing Standards or, in their absence, the *Overseas Environmental Baseline Guidance Document*.

1.2. Concept:

1.2.1. The Air Force must safely manage SW and HW and comply with laws and regulations to protect the environment and the people living and working on and off Air Force facilities.

1.2.2. This instruction is intended to provide major commands (MAJCOM) and installations a framework for complying with environmental standards applicable to SW and HW.

1.2.3. MAJCOMs provide additional implementing guidance in their supplements to this AFL. The MAJCOM supplement must identify the specific "actors" who have implementing responsibility and include any "how-to" guidance needed to comply.

1.3. Responsibilities:

1.3.1. The Assistant Secretary of the Air Force for Manpower, Reserve Affairs, Installations, and Environment (SAF/MI) promulgates and oversees policy for SW and HW compliance.

1.3.2. The Civil Engineer (HQ USAF/CE) formulates policy, allocates resources, and oversees execution of SW and HW compliance programs throughout the Air Force.

1.3.3. MAJCOMs provide execution guidance and oversee implementation. All references to MAJCOMs include the Air National Guard Readiness Center (ANGRC) and other agencies that HQ USAF calls "MAJCOM equivalent."

Chapter 2

HAZARDOUS WASTE PROGRAM

2.1. General Requirements:

2.1.1. Installation Commanders take responsibility for complying with HW disposal laws. Disposal of HW by the DRMO or by Air Force contractors does not relieve the installation commander of this obligation.

2.1.1.1. The base Environmental Protection Committee (EPC) works with the installation commander to oversee compliance with HW laws per AFI 32-7005, *Environmental Protection Committees*.

2.1.2. Installations submit programming and budgeting needs for facilities, equipment, and manpower per AFI 32-7001, *Environmental Budgeting* and AFI 65-106, *Appropriated Fund Support of Morale, Welfare and Recreation Programs and Nonappropriated Fund Instrumentalities*.

2.1.3. Installations with RCRA permits for HW storage, treatment, or disposal must comply with those permits. The permits' restrictions supersede this instruction.

2.1.4. HW generators must have a HW management program to comply with Federal, State, and local regulations and this instruction. The HW management program must include:

- A hazardous waste management plan (HWMP).
- Training.
- Characterization.
- Turn-in and disposal.
- Inspections.
- Permits and record keeping.
- Host-tenant support.

2.2. Management Plan:

2.2.1. The HWMP must reflect current regulatory requirements and installation HW activities.

2.2.2. The EPC must update and approve the plan annually.

2.2.3. MAJCOMs specify the HWMP's format and content. It contains at least the items listed in **Attachment 2**.

2.2.3.1. If the DRMO acts as the disposal agent, the HWMP must also include the HW turn-in requirements in DoD 4160.21-M, *Defense Reutilization and Marketing Manual*.

2.3. Training:

2.3.1. All personnel who work with HW and their supervisors must receive and successfully complete HW training before working with HW. They must also successfully complete annual refresher training as the MAJCOM requires. The HW training covers at least the topics in **Figure 2.1**.

Figure 2.1. Essential Hazardous Waste Training.

TRAINING	
A.	Introduction to the Resource Conservation and Recovery Act
B.	Identification of Hazardous Waste
C.	Accumulation Point Management
D.	Container Use, Marking, and Labeling, and On-base Transportation
E.	Waste Turn-in Procedures
F.	Manifesting and Transportation of Hazardous Waste
G.	Spill Prevention and Emergency Response
H.	Waste Reduction
I.	Personnel Safety and Health and Fire Safety

2.3.2. MAJCOMs set minimum instructor qualifications for HW training.

2.3.3. HW generators keep training records of former employees for 3 years from the last day the person worked. Keep all other training records permanently.

2.3.3.1. Although MAJCOMs determine format and additional requirements, minimally training records include:

- Student's name.
- Job title.
- Job description.
- Previous HW training.
- Dates of training.
- Instructor's name.
- Test score (optional).
- Date of annual refresher course.

2.4. Characterization:

2.4.1. Installations must characterize all their HW streams. Characterization consists of:

- Identifying (waste analysis plan).
- Quantifying (HW stream inventory)
- Describing (HW profile sheet).

2.4.2. Waste Analysis Plan (WAP) describes procedures to identify all HW streams and those streams needing detailed HW determination. Minimally the WAP lists:

- Wastes evaluated and analyzed.
- Test methods used.

- HW sampling methods.
- Sample analysis locations and frequency.
- Description of analytical methods.
- Sample documentation.
- Sample quality assurance and quality control procedures.
- Sample request procedures.

2.4.2.1. To analyze the waste stream, ask the person who generated the waste about it and do the analytical tests that 40 CFR 261.10 describe.

2.4.2.2. Require chemical analysis for waste streams of chemical mixtures.

2.4.2.3. MAJCOM supplements to this AFI specify sampling frequencies for HW streams.

2.4.2.4. Reevaluate streams as needed to make sure waste stream characteristics have not substantially changed (for example, the manufacturer substitutes nonhazardous chemicals for hazardous chemicals). **Figure 2.2.** gives the recommended re-evaluation frequencies for chemical mixture waste streams. Describe the re-evaluation in the WAP.

2.4.2.5. As part of WAP/HW profile record-keeping, document chemical and physical analysis for each waste stream sampled.

Figure 2.2. Reevaluation Frequencies for Chemical Mixtures.

REEVALUATION FREQUENCIES	
A.	High volume HW streams. Sample and analyze each waste stream of more than three 55-gallon drums per year at least annually or whenever processes, materials, or materials manufacturers change.
B.	Low volume HW streams. Sample and analyze each waste stream of three 55-gallon drums or less per year at least every 3 years or whenever processes, materials, or materials manufacturers change.

2.4.3. HW stream inventory describes all HW streams generated. All Air Force installations must have a waste stream inventory that lists at least:

- Generating activity's identity.
- Generating activity's location.
- Unique waste stream number.
- Estimated annual quantity disposed.
- Disposal location.
- Disposal method.
- Waste characteristics (for example, EPA waste code, state waste code, and EPA priority pollutant number).

2.4.4. HW Profile Sheet gives details of each HW stream.

2.4.4.1. Document the waste stream description on HW profile sheet, Defense Reutilization and Marketing Service (DRMS) Form 1930.

2.4.4.2. The WAP and waste stream inventory contain much of the information you need to complete DRMS Form 1930.

2.4.4.3. To use a different profile sheet MAJCOMs must obtain HQ USAF/CEV approval.

2.4.5. Handle all uncharacterized wastes as HW and manage per 40 CFR 262.34, pending determination.

2.4.5.1. For the accumulation start date, use the waste discovery date.

2.5. Accumulation:

2.5.1. Accumulate HW following Federal and State regulations.

2.5.1.1. Minimize the number of accumulation locations to facilitate compliance.

2.5.1.2. Name an individual to manage each accumulation site properly, including its condition and use.

2.5.2. Installations must not manage HW that the DoD does not own except as DoD Directive 6050.8, *Storage and Disposal of Non-DoD Owned Hazardous or Toxic Materials on DoD Installations*, authorizes. *EXCEPTIONS:* Actions to protect the public (for example, temporary storage or disposal of explosives) are permitted.

2.5.2.1. MAJCOMs forward requests for exception to HQ USAF/CE, who in turn forwards them through SAF/MI to the Deputy Undersecretary of Defense for Environmental Security (DUSD[ES]).

2.5.2.2. When the non-DoD waste meets exception criteria, the waste's owner must prepare and obtain all needed permits, meet financial requirements, and prepare required environmental documentation before using Air Force property.

2.5.2.3. The waste's owner must leave the facility in its original condition.

2.6. Turn-in and Disposal Procedures:

2.6.1. For HM:

- Installations must make maximum use of HM before sending it to DRMOs for disposal.
- Installations must make sure that HM given to the DRMO for reutilization, transfer, donation, or sale (RTDS) or disposal meets the requirements of DoD Manual 4160.21-M.
- When HW fails DRMO's RTDS program, it will be disposed of as HW.
- For proper turn in and disposal, installations must attach hazard communication standard (HSC) compliant labels and material safety data sheet (MSDS) information, or include that information in the Hazardous Material Information System (HMIS).
- HM given to DRMO without these items will be disposed of as HW and the disposal cost will be charged to the generating activity.
- Air Force installations must not issue, ship, use, or dispose of improperly labeled HM.

2.6.2. For HW:

- Installations follow DoD Manual 4160.21-M when turning HW into DRMO.
- Inform HQ USAF/CEV of any suggested improvements to DoD Manual 4160.21-M and any MAJCOM implementing procedures.
- Installations make sure all HW is weighed in the presence of an authorized DoD official.
- DRMS, through their DRMOs, act as the DoD HW disposal agent.
- Installation commanders may use other disposal agents if the commander decides it is in the best interest of the Air Force and the MAJCOM agrees.
- Consider comparative disposal cost, Government liability, and the qualified and experienced contractors available.
- MAJCOMs send HQ USAF/CEV copies of all approvals.

2.7. Disposal Contracts. After you've decided to contract for HW disposal and recycling, develop and submit documents to the operational contracting officer (OCO) per AFI 64-102, *Operational Contracting*. These documents include:

- Request for purchase.
- Performance work statement.
- Quality assurance surveillance plan.

2.7.1. Document Preparation. See AFI 64-108, *Service Contracts*, which tells how to write a performance work statement and a quality assurance plan.

2.7.1.1. The Staff Judge Advocate and the base environmental manager review and approve these documents before sending them to the OCO. Their reviews ensure that documents follow Federal, State, and local regulations and requirements.

2.7.2. Contracts and Requirements. HW disposal contracts and recycling requirements must:

- Be at least as stringent as DRMO requirements.
- Honor existing contracts written by the DRMO.
- Follow the MAJCOM's contracting practices.

2.7.2.1. The contracting office writes a solicitation and a contract, using provisions and clauses from the Federal Acquisition Regulation (FAR) and its supplements, including those of FAR part 23, *Environment, Conservation, Occupational Safety and Drug-Free Workplace*.

2.7.2.2. Contracts for HW disposal must require the contractor to make sure its employees receive appropriate training as Federal, State, and local law requires.

2.7.3. Inspections of Contractor Facilities:

2.7.3.1. If appropriate, survey and visit the proposed treatment or disposal site for all potential contractors.

2.7.3.2. Before awarding a contract, verify the permits held by the various treatment or disposal sites.

2.7.3.3. Evaluate all proposed HW transport contractors the same way.

2.7.3.4. Do on-site "no notice" followup verification audits for all contractor HW treatment and disposal facilities receiving Air Force HW. Do these inspections yearly to verify proper "cradle-to-grave" waste handling and disposal.

2.8. Inspections. The HW program consists of scheduled and unscheduled inspections of HW activities.

2.8.1. Perform internal and external environmental compliance assessments per AFI 32-7045, *Environmental Compliance Assessment and Management Program (ECAMP)*.

2.8.2. Installation commanders also conduct no-notice inspections of HW generating, accumulation, and storage activities.

2.8.3. Document findings and begin corrective actions promptly.

2.8.4. As security requirements permit, support environmental compliance inspections.

2.9. Permits and Record Keeping:

2.9.1. Note that the installation commander signs environmental permits and receives regulatory agency correspondence and enforcement actions.

2.9.1.1. Have the commander or designated individual sign the manifests that track off-base HW shipment and recycling.

2.9.1.2. Send the MAJCOM and the appropriate Air Force regional compliance office a copy of each HW permit application and HW permit.

2.9.2. Track HW with the EPA HW manifest (or State equivalent) and report HW management activities per AFI 32 7002, *Environmental Information Management Systems*.

2.9.2.1. MAJCOMs whose HW tracking and reporting systems differ from AFI 32-7002 must get HQ USAF/CEV approval in order to use them.

2.10. Host-Tenant Support:

2.10.1. The Air Force supports the HW disposal needs of both Air Force and DoD tenants on Air Force installations.

2.10.1.1. For intraservice support, host Air Force installations plan and fund for their tenants' HW disposal needs per AFI 32-7001.

2.10.2. Tenants:

- Follow all laws and regulations and the installation HWMP.
- Provide input and submit reports that the HWMP requires.

2.10.2.1. When tenants do not comply with HW laws, the installation commander may take any action needed to require them (and their contractors) to comply.

2.10.2.2. Tenants responsible for HW management facilities must seek permitting through facility-wide permits. The tenant then signs as "operator" and the installation commander signs as "owner."

2.10.3. If a tenant organization generates enough HW to burden the host, the host and tenant negotiate an agreement on how much the tenant pays for HW disposal.

EXCEPTIONS: All industrially-funded Air Force tenants and Services activities. These activities pay their operation and maintenance expenses, including HW disposal costs.

2.10.3.1. AFI 65-106 gives instructions for funding HW disposal for MWR activities.

2.10.4. For interservice support of a DoD component or agency tenant, host installations may seek reimbursement for HW disposal costs for on- and off-base tenants, following the procedures in AFI 65-601, volume 1, *USAF Budget Policies and Procedures*.

2.10.4.1. If host-tenant support agreements (HTSA) or interservice support agreements (ISA) do not reflect reimbursement procedures, renegotiate. In the negotiations:

- Consider budget lead time to minimize the effect on tenants.
- Give the installation commander wide latitude to determine the most effective arrangement for negotiating cost-sharing with tenants.
- Consider that the installation commander carries both initial and primary liability for HW management when including HW disposal services in HSTAs or ISAs.

Chapter 3

SOLID WASTE PROGRAM

3.1. General Requirements:

3.1.1. Each installation must have a solid waste (SW) management program. **Attachment 2** summarizes Federal SW management requirements. The SW management program must address:

- A solid waste management plan (SWMP).
- Handling, storage, and collection.
- Disposal.
- Record-keeping and reporting.
- Pollution prevention.

3.1.1.1. AFI 32-7080, *Pollution Prevention Program*, contains the SW requirements for preventing pollution through source reduction, resource recovery, and recycling.

3.1.2. Consider these costs as utility costs, not environmental compliance costs:

- Programming and budgeting requirements for facilities, equipment, and manpower.
- Tipping fees.
- On-base landfill operations to meet SW collection and disposal requirements. (See AFI 32-7001.)

3.2. Management Plan:

3.2.1. All Air Force installations must have a complete SWMP that meets the requirements of AFR 91-8, *Solid Waste Management*, **Chapter 3**. Developed at the installation level, the SWMP contains guidance for managing SW. It supports the development and implementation of State plans RCRA Subtitle D requires. To ensure compliance with Federal and State SWMP requirements, Air Force SWMPs contain:

- Inventory and analysis of SW disposal technologies and methods.
- Inventory of SW streams and management methods.
- Analysis of SW recovery, conservation, and recycling.
- Evaluation of any on-base operating landfills.
- Plan implementation.

3.3. Handling, Storage, and Collection:

3.3.1. Installations make sure that receptacles, collection routes, collection schedules, and collection equipment (trucks) meet 40 CFR 243, DoDD 4165.60, *Solid Waste Management - Collection, Disposal, Resource Recovery and Recycling Program*, and AFR 91-8 criteria, as well as State and local requirements.

3.3.1.1. Get all permits needed for SW handling, storage, and collection (including SW transfer facilities) and perform any required maintenance inspections and notifications.

3.3.1.2. Vehicles collecting and transporting SW must meet all standards, such as:

- Motor carrier safety standards (49 CFR parts 390 through 396).
- Noise-emission standards for motor carriers in interstate commerce (40 CFR part 202).
- Federal motor vehicle safety standards (49 CFR parts 500 and 580 only for collection equipment that the Federal Government owns).

3.3.1.3. In addition to 40 CFR 243 and DoD Directive 4165.60 requirements, the collection equipment must meet the standards of the American National Standards Institute (ANSI).

3.3.2. The installation commander names military personnel, civilian personnel, or contractors as SW collection personnel.

3.3.2.1. When contractors collect waste, the contractor's SW collection plan must meet Air Force, Federal, State, and local requirements.

3.4. Disposal:

3.4.1. All solid waste disposal must meet 40 CFR 240 and 241, DoD Directive 4165.60, and AFR 91-8 criteria and State and local requirements.

3.4.1.1. These regulations and directives contain specific location, design, and operating criteria for new thermal processing and land disposal facilities. These general requirements apply to all SW disposal.

3.4.1.2. As a subset of SW, municipal SW must meet the additional, more stringent requirements of 40 CFR 258.

3.4.2. Air Force installations use municipal or regional facilities for SW disposal, when feasible. When an installation can't use such and its own facilities, their construction and operation must follow all laws, regulations, and directives.

3.4.3. Air Force installations must dispose of SW in a permitted secure landfill or other State-approved site, for example, a thermal-processing facility.

3.4.3.1. Note that the Air Force prefers ultimate disposal by recycling and composting. AFI 32-7080 addresses alternatives.

3.4.3.2. Verify permits and licenses for off-base landfills.

3.4.3.3. Remember each installation must obtain siting authorization, permits, and licenses to construct and operate an on-base SW landfill or thermal treatment facility. For specific guidelines, see:

- 40 CFR 240 for thermal processing of solid wastes.
- 40 CFR 258 for siting and design of municipal SW landfills.

3.4.4. Before closing an on-base landfill, plan adequate lead time for meeting post-closure requirements, typically 30 years for maintenance and groundwater monitoring. Post-closure procedures may require long-term operation of leachate collection and treatment systems or a system for extracting landfill gas.

3.5. Inspections. The SW program consists of scheduled and unscheduled inspections of SW collection, transfer, and disposal facilities.

3.5.1. Perform internal and external environmental compliance assessments following AFI 32-7045.

3.5.2. Document inspection findings and begin corrective actions promptly.

3.5.3. As security requirements permit, support environmental compliance inspections.

3.5.4. Ensure each installation inspects industrial shop waste receptacles to make sure they contain no HW.

3.5.4.1. Keep records for at least 2 years after the inspection date.

3.5.4.2. Inform all installation personnel and especially industrial shop personnel of prohibited materials.

3.6. Record Keeping and Reporting:

3.6.1. Maintain daily operating records following the instructions for managing service contracts for refuse collection, disposal, and recycling.

3.7. Pollution Prevention:

3.7.1. AFI 32-7080 covers source reduction, resource recovery, and recycling activities.

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Attachment 1

GLOSSARY OF ABBREVIATIONS, ACRONYMS, AND TERMS

Abbreviations and Acronyms

AF—Air Force

AFCEE—Air Force Center for Environmental Excellence

AFCEE/CCR—Air Force Center for Environmental Excellence Regional

A, D, S—Compliance Offices (Atlanta, Dallas, San Francisco)

AFI—Air Force Instruction

AFLSA/JACE—Air Force Legal Support Agency, Environmental Law Division

AFM—Air Force Manual

AFO—Accounting and Financing Officer

AFR—Air Force Regulation

ANSI—American National Standards Institute

ASD (P&L)—Assistant Secretary of Defense for Production and Logistics

CE—Civil Engineer

CERCLA—Comprehensive Environmental Response, Compensation, and Liability Act

COPARS—Contractor Operated Parts Store

CFR—*Code of Federal Regulations*

DLA—Defense Logistics Agency

DoD—US. Department of Defense

DOT—US Department of Transportation

DRMO—Defense Reutilization and Marketing Office

DRMS—Defense Reutilization and Marketing Service

DTID—Disposal Turn-In Document

DUSD(ES)—Deputy Undersecretary of Defense for Environmental Security

ECAMP—Environmental Compliance Assessment and Management Program

EPA—US Environmental Protection Agency

EOD—Explosive Ordnance Disposal

EPC—Environmental Protection Committee

FAR—*Federal Acquisition Regulation*

FFCA—Federal Facilities Compliance Act

FOA—Field Operating Agency

GOCO—Government-owned, Contractor-operated

HCS—Hazard Communication Standard

HMIS—Hazardous Material Information System

HM—Hazardous Material

HMTA—Hazardous Material Transportation Act

HQ NGB/CE—National Guard Bureau Civil Engineer

HQ USAF—Headquarters, US Air Force

HQ USAF/CE—Headquarters, US Air Force, Civil Engineer

HQ USAF/CEV—Headquarters, US Air Force, Civil Engineer, Directorate Environmental Quality

HQ USAF/JA—The Judge Advocate General

HQ USAF/LG—Deputy Chief of Staff, Logistics

HQ USAF/RE—Chief of Air Force Reserve

HQ USAF/SG—The Air Force Surgeon General

HSWA—Hazardous and Solid Waste Amendments

HTSA—Host-Tenant Support Agreement

HW—Hazardous Waste

HWMP—Hazardous Waste Management Plan

ISSA—Interservice Support Agreement

MAJCOM—Major Command

MSDS—Material Safety Data Sheet

MWR—Morale, Welfare and Recreation

OCO—Operational Contracting Officer

OSD—Office of The Secretary of Defense

OSHA—US Occupational Safety and Health Administration

PCB—Polychlorinated biphenyl

R&D—Research and development

RCRA—Resource Conservation and Recovery Act

RTDS—Reutilization, Transfer, Donation or Sale

SAF—Secretary of the Air Force

SAF/AQ—Assistant Secretary of the Air Force for Acquisition

SAF/MI—Assistant Secretary of the Air Force (Manpower, Reserve Affairs, Installations and Environment)

SAF/MIQ—Deputy Assistant Secretary of the Air Force (Environment, Safety and Occupational Health)

SBSS—Standard Base Supply System

SARA—Superfund Amendments and Reauthorization Act

SW—Solid Waste

SWMP—Solid Waste Management Plan

TSCA—Toxic Substances Control Act

WAP—Waste Analysis Plan

WIMS-ES—Work Information Management System—Environmental Subsystem

Terms

Accumulation Site—A provision of 40 CFR 262, subpart C, which allows storage of hazardous wastes for a period of up to 90 days without a storage permit, or without having interim status. Typically the sites are distant from the activities and subject to additional inspection and containment requirements in subparts I and J of 40 CFR 265. (See "initial accumulation point" in this glossary.)

Characteristic Waste—A waste with any characteristic listed in 40 CFR 261, subpart C (for example, toxicity, corrosiveness, ignitability, or reactivity).

EPA Waste Code—An EPA HW number listed in 40 CFR 261, subpart C (characteristic waste) or subpart D (listed waste).

Generator—A person or a site, whose act or process produces HW or whose act first subjects HW to regulation. EPA and State environmental regulatory agencies typically consider the Air Force installation as the generator. Therefore, in this AFI "HW generator" refers to the installation commander or the commander's named designee.

Generating Activity—Each organization (including tenants), shop, or work area using an operation or process that first generates an HW stream. The installation HWMP must identify generating activities.

Hazard Communication Standard—A Federal Occupational Safety and Health Administration (OSHA) requirement, 29 CFR 1910.1200, that requires labeling and MSDSs so employees know materials are hazardous.

Hazardous Constituent—Any component or chemical in a mixture, found in 40 CFR 261, appendix VIII or 40 CFR 264, appendix IX.

Hazardous Material (HM)—Any material that presents a physical or health hazard and requires an MSDS as defined in the latest version of FED-STD 313.

Hazardous Material Generating Activity—Each installation organization (including Air Force and non-Air Force tenants) that creates HM requiring disposal.

Hazardous Waste—Any solid waste defined in 40 CFR 261.3 or State HW management rules and regulations.

Hazardous Waste Characterization—The identification, description, and quantification of an HW stream.

Hazardous Waste Management Plan (HWMP)—An installation-developed plan containing guidance for base personnel on local procedures for managing HW and incorporating pollution prevention practices

into HW management pollution. The HWMP should include all tenants, including Government-owned, contractor-operated (GOCO) facilities that generate HW.

Hazardous Waste Profile Sheet—A document (DRMS Form 1930) that describes the physical and chemical properties of HW.

Listed Waste—A specifically identified solid waste, material, or item listed in 40 CFR 261, Subpart D.

Manifest—HW shipping document required by Federal or State regulatory agencies for transportation of HW. Manifests that the installation commander or a named representative signs track HW to a permitted or interim status treatment, storage, or disposal facility. (Refer to 40 CFR 262, subpart B.)

Material Safety Data Sheet (MSDS)—A document containing the data required by, and prepared in accordance with FED STD 313, to communicate to the user of the chemical, physical, and hazardous properties of material.

Initial Accumulation Point—A collection point located at, or near, the point of waste generation where wastes are initially accumulated. The area must be under the control of the operator of the process generating the waste. The operator should be near the area often enough to detect a leak within a reasonable timeframe. A maximum of 55 gallons of HW or one quart of acutely HW may be accumulated in an initial accumulate point. If more than this amount is accumulated, the excess must be move to an accumulation site within 3 days of exceeding the limit. Unless the quantity limit is exceeded, there are no storage time limits that apply to initial accumulation points. Initial accumulation points are also known as satellite accumulation points.

Solid Waste—Any discarded material as defined in 40 CFR 261.2.

Attachment 2

HAZARDOUS WASTE MANAGEMENT PLAN ELEMENTS

1. Letter of Instruction.
2. Information and Emergency Contacts.
3. Introductory Materials.
 - a. Table of contents
 - b. Record of annual review.
 - c. Record of changes.
 - d. List of tables and figures.
4. Introduction.
5. Responsibilities.
6. Organization Chart.
7. Location Maps.
8. Hazardous Waste Inventory.
9. Waste Analysis Plan.
10. Hazardous Waste Management Procedures.
11. Reporting.
12. Training.
13. Contingency Plan Summary.
14. Preparedness and Spill Prevention Summary.
15. Pollution Prevention Summary.

Attachment 3

OVERVIEW OF SOLID AND HAZARDOUS WASTE MANAGEMENT REQUIREMENTS

A3.1. Summary of Applicable Federal Laws Regulating Hazardous and Solid Waste:

A3.1.1. Occupational Safety and Health Act. The Occupational Safety and Health Act (OSHA, 29 U.S.C. 651, *et seq.*) sets standards for safe working conditions. In addition, OSHA sets training requirements for Resource Conservation and Recovery Act (RCRA) facilities and HW sites. Title 29 of the *Code of Federal Regulations*, parts 1900 through 1910 (29 CFR 1900 through 1910), contains OSHA standards. 29 CFR 1926 contains OSHA construction standards.

A3.1.2. Hazardous Material Transportation Act. The Hazardous Material Transportation Act (HMTA, 49 U.S.C. 1801, *et seq.*) of 1974 requires the Secretary of Transportation to declare standards for commercially transporting hazardous materials. These standards protect public health and safety or property. 49 CFR 170 to 179 includes the rules.

A3.1.3. Toxic Substances Control Act. The Toxic Substances Control Act (TSCA, 15 U.S.C. 2601, *et seq.*) made law a program for evaluating the harmful effects of newly manufactured chemicals. TSCA regulates the storage, treatment, and disposal of polychlorinated biphenyls (PCBs). See 40 CFR 750 and 761.

A3.1.4. Resource Conservation and Recovery Act and Hazardous and Solid Waste Amendments. The Resource Conservation and Recovery Act (RCRA, U.S.C. 6901, *et seq.*) as amended by the Hazardous and Solid Waste Amendments (HSWA) of 1986, sets minimum standards for "cradle-to-grave" management of SW and HW. See the EPA RCRA regulations for:

- HW management (Subtitle C) in 40 CFR parts 260 to 272.
- SW (Subtitle D) in 40 CFR parts 240 to 244, 257, and 258.
- Underground storage tanks (Subtitle I) in 40 CFR 280 and 281.

A3.1.5. Comprehensive Environmental Response, Compensation, and Liability Act and Superfund Amendments and Reauthorization Act. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, 42 U.S.C. 9601, *et seq.*) of 1980 and the Superfund Amendments and Reauthorization Act (SARA) of 1986 authorized funds to clean up abandoned HW sites and provided that the responsible parties reimburse the Government for cleanup costs.

A3.1.6. Federal Facility Compliance Act. The Federal Facility Compliance Act (FFCA, 42 U.S.C. 962, *et seq.*) takes away the Federal Government's sovereign immunity from civil penalties for violating State, Federal, and local SW and HW laws. This legislation allows State and Federal regulatory agencies to fine Federal facilities for violating State, Federal, and local SW and HW laws.

A3.2. State and Local Solid and Hazardous Waste Management Requirements. States must adopt or enact regulations at least as stringent as Federal regulations for SW and HW. Each State has SW regulations, many of which are more stringent than Federal HW regulations. Local requirements may restrict zoning, transportation, and other activities.

A3.3. Summary of US Department of Defense (DoD) Solid and Hazardous Waste Management Requirements. The Defense Logistics Agency (DLA) provides recycling, reuse, and disposal services for each DoD installation through the DRMS and its field activities, the DRMOs. See:

- AFI 32-7080, *Pollution Prevention Programs* which addresses SW recycling.
- Chapter IX of DoD Manual 4160.21-M, *Defense Reutilization and Marketing Manual*, and DRMS-M 6050.1, *Environmental Compliance for the DRMS Hazardous Property Program*, which explain general procedures for implementing the DRMS hazardous property program .
- DoD Directive 4165.60, *Solid Waste Management - Collection, Disposal, Resource Recovery and Recycling Program*, which contains policies and procedures for managing SW per EPA SW regulations.